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ABSTRACT

Developed by over 400 industrial arts teachers, state and local supervisors, teacher educators, and consultants, these standards are comparative statements that were developed to determine the strengths and weaknesses of industrial arts programs. While the standards were written primarily for secondary school level industrial arts programs, many of them are also applicable for elementary and postsecondary programs. The standards are divided according to the following ten topics; philosophy (development, utilization, review and revision); instructional program (goals, objectives, content, scheduling); student populations served (individual differences, sex equity); instructional staff (legal/regulatory qualifications, professional responsibilities, personal qualifications); administration and supervision (staffing, planning and organizing, budgeting, directing, monitoring, data collecting and reporting, communicating); support services (human resources, physical resources, financial resources); instructional strategies (planning, implementing, reviewing and revising); public relations (target populations, media); safety and health (program, physical environment, records); and evaluation process (establishing a data collection and analysis system, collecting and analyzing data, reporting, decision making). Also provided are forms for completing an industrial arts program profile and a deficiency corrections report. (A series of related industrial arts program guides are available separately--see note.) (MN)

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Standards for Industrial Arts Programs

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Standards for Industrial Arts Programs Project
Industrial Arts Education
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061
November 1981

CE 031 589

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Handbook for the Standards

Background

The Standards Project

The former United States Office of Education (USOE) and several professional associations have long been interested in developing and promoting quality standards for selected subject areas. In 1978, responding to recommendations by the American Industrial Arts Association (AIAA) and the Industrial Arts Division of the American Vocational Association (IAD/AVA), the USOE funded the Standards for Industrial Arts Programs Project at Virginia Polytechnic Institute and State University to develop standards for industrial arts. The three primary objectives of the project, as stated by the USOE, were:

- To develop a data base on industrial arts programs (as defined in Title I, Part C, Section 195(15) of the Education Amendments of 1976) and on industrial arts student organization activities as an integral part of the industrial arts instructional program.
- To develop a set of standards and related handbooks for ensuring quality industrial arts programs.
- To familiarize, publicize, and demonstrate the standards developed for industrial arts programs.

From October 1978 through November 1979, the project developed a data base. The results of this effort are included in the *Report of Survey Data* published by and available through the Industrial Arts Program Area, Virginia Polytechnic Institute and State University, Blacksburg. Also during this period, future activities were planned and the status study findings were disseminated.

The standards developed under this USOE contract are included in this publication. These standards serve as models for schools, districts, and states that wish to develop, adopt, or refine standards for the improvement of their industrial arts programs.

The standards for industrial arts presented here were developed by over 400 industrial arts teachers, state and local supervisors, teacher educators, and consultants. The standards are comparative statements that were developed to determine the strengths and weaknesses of industrial arts programs.

The standards were written to apply to both vocationally approved, federally funded as well as non-federally funded industrial arts programs. While the standards were written primarily for secondary school level industrial arts programs, many of the specific statements in the standards also are applicable for elementary and post secondary programs. Of course, the use of these standards as an assessment tool by any school system is voluntary.

The four major documents produced by the Standards for Industrial Arts Programs Project are entitled:

- *Standards for Industrial Arts Programs* (this document),
- *AIASA Guide for Industrial Arts Programs,*
- *Sex Equity Guide for Industrial Arts Programs,* and
- *Special Needs Guide for Industrial Arts Programs.*

The three guides should be used with the standards. The guides offer suggestions for program improvements related to student organizations, sex equity, and students with special needs. Together,

the standards and the three guides can help improve industrial arts programs. They contain the best thinking of the industrial arts profession on what industrial arts programs should be and how they can be improved.

How the Standards Were Developed

The standards were developed and validated in a series of ten regional workshops conducted from February 1980 to May 1981. In each of these workshops, participants were given the task of developing and/or validating standards under ten major standard topics. These initial ten topics were formulated through a literature review and input from the project staff and advisory committees (see Acknowledgments). Each state and territory was guaranteed a minimum of two participants at the workshop held in its region, with greater representation given to states with larger industrial arts teacher populations.

A special workshop was conducted in November 1980 to address the unique concerns of AIASA, sex equity, and students with special needs throughout the standards. Also, special hearings were held during the AVA Convention in December 1980 and the AIAA Conference in March 1981.

A national advisory committee, a five-member subcommittee, and a local advisory committee met periodically to assist in all aspects of the project. These committees aided in the research phase, reviewed and considered all input from the workshops and special hearings, and refined the standards and guides. This procedure ensured that the standards were systematically developed, thoroughly reviewed, and empirically validated.

Industrial arts, like any school subject, is in a constant process of change and a variety of program structures has evolved. It is impossible to write exhaustive, conclusive standards that would answer all of the concerns of these diverse programs. The project staff and the other educators who helped develop the standards have kept the evolution of industrial arts in mind. They fully expect the standards to improve existing industrial arts programs, evolve with time, and lend themselves to modification as industrial arts programs change emphasis and expand.

Application of the Standards

Assessing Industrial Arts Programs

Each school system should have a systematic, continuous evaluation process which utilizes accepted standards to assess all elements of its industrial arts program. The standards contained in this publication will serve this purpose. The narrative that follows illustrates how these standards will fit into the evaluation process. To simplify this process, assessment can be divided into four major steps. These are: planning an assessment, conducting an assessment, reporting the findings of an assessment, and overcoming deficiencies identified during an assessment.

- **Step 1 - Planning an Assessment**
  Before a program is assessed, decisions must be made concerning a) which program will be assessed, b) who will be members of the assessment team, and c) how and when the assessment will take place. The assessment process may be initiated by either the state industrial arts supervisor, a local administrator (such as the industrial arts supervisor for a local school system, a school principal, or a school superintendent), or an industrial arts classroom teacher. The team should include one or more of each of the following: industrial arts classroom teachers, school administrators, students, parents, business and industry representatives, and other consultants. This team should meet and become familiar with the standards and the assessment process.
- **Step 2 - Conducting an Assessment**
  The assessment process involves comparing a given industrial arts program to standards. In the process, the assessment team records whether the program meets, exceeds, or fails to meet each standard. A condensed profile of the program assessment may be drawn using the Industrial Arts Program Profile Form (see section on Assessment Forms).
- **Step 3 - Reporting the Findings of an Assessment**
  The assessment team reports strengths and weaknesses of the program being assessed to personnel responsible for correcting deficiencies. The weaknesses are itemized and explained and suggested priorities for correcting deficiencies are made on the Deficiency Correction Report (see section on Assessment Forms).
- **Step 4 - Overcoming Deficiencies Identified During an Assessment**
  Procedures and resources are employed to overcome deficiencies. The assessment team monitors these procedures to determine their success in correcting deficiencies and recommends a time line for program re-assessment.

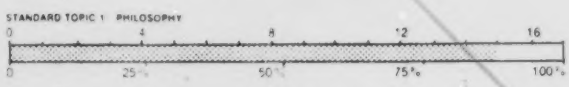
Using the Standards

An understanding of the classification and organization of the standards is necessary before conducting an assessment of the industrial arts program. The

standards are divided into ten standard topics. They are: Philosophy, Instructional Program, Student Populations Served, Instructional Staff, Administration and Supervision, Support Systems, Instructional Strategies, Public Relations, Safety and Health, and Evaluation Process. Each of the standard topics is divided into a number of sub-topics. Under each standard topic and major sub-topics are global statements which describe the standards; these should not be marked. For example, Philosophy is divided into three sub-topics: 1.1 Development, 1.2 Utilization, and 1.3 Review and Revise. Each of these sub-topics contains a number of standards to which the program may be compared.

The process of assessing a program with the standards is relatively simple. Next to each standard there are three symbols. These symbols stand for "Below Standard" (▽), "Meets Standard" (○), and "Exceeds Standard" (△). Assessing a program with the standard means indicating whether the program falls below, meets, or exceeds the standard by marking the appropriate symbol to the right of each standard.

On the last page of each standard topic there is a section entitled "Summary for Profile." In this section a space is provided to record the number of standards which are marked "Below Standard." Subtracting this number from the total number of standards for the topic determines the number of standards that are marked "Meets Standard" and "Exceeds Standard." The number of standards met or exceeded for each standard topic is used to compile a program profile. An Industrial Arts Program Profile Form is provided in the Assessment Forms section following Standard Topic 10. After completion, this profile is composed of bar graphs upon which are plotted the total number of "meets" and "exceeds" calculated for each standard topic. A sample of a completed bar graph for the first standard topic, Philosophy, is shown below:



As an example, the number "15" has been plotted on the graph and the bar is filled in up to this number. The graphs are divided along their top edges into increments of the total number of standards for the topic they represent. Along their bottom edges, the bar graphs are divided into percentage scales so that it can be quickly ascertained what percentage of the standards under the topic the program meets or exceeds. These bar graphs are not designed to rank in importance either the standard topics or the individual statements contained in them. All of the standards in each standard topic are considered equally important. A rating of 85 percent on the standard topic "Philosophy," for example, does not mean that the areas marked "Below Standard" can be ignored. The ultimate goal is 100 percent. Also a space is provided to summarize comments and provide additional information on strengths and, particularly, weaknesses of the program.

Overcoming Deficiencies

A major component of assessing an industrial arts program is the correction of identified deficiencies. It is recommended that a separate report be filled out for each standard that is marked "Below Standard." A Deficiency Correction Report Form is provided in the Assessment Forms section for this purpose. The report form should be completed by the assessment team, with major emphasis placed upon clear and

concise statements of the deficiencies and plans to overcome them.

After the Deficiency Correction Reports have been completed, they should be presented to administrators, school board members, or others responsible for the industrial arts program. The reports will provide guidance to the person(s) responsible for correcting program deficiencies. The correction process should be monitored by the assessment team, as needed, to assure that each of the deficiencies is corrected. After all deficiencies are corrected to the assessment team's satisfaction the overall assessment process is complete.

Using the Guides for Program Improvement

Although there are numerous publications which deal with student organizations, sex equity, and special needs students, additional emphasis on these areas is given in three guides. These are companion publications to, and should be used along with, the standards.

The *AIASA Guide for Industrial Arts Programs* promotes industrial arts student organizations as integral parts of industrial arts programs. The United States Department of Education (USDE) recognizes the American Industrial Arts Student Association (AIASA) as an approved vocational student organization. While industrial arts students belong to many student organizations within a school, AIASA is the only national student organization serving industrial arts students exclusively. Vocational subjects other than industrial arts have long had student organizations, much to their benefit. Infusing AIASA into the industrial arts curriculum, either by initiating a local AIASA chapter or by affiliating an existing student organization with AIASA, can benefit students and improve the industrial arts program.

The *Sex Equity Guide for Industrial Arts Programs* documents the growing need for educators to recognize the major social and economic changes in the roles and perceptions of males and females. It directs the attention of industrial arts educators to the vital role they play in increasing career options for all students. Technical assistance is provided in the guide for ensuring sex equity. The guide will assist educators in measurably reducing sex bias and sex-role stereotyping attitudes and practices. It offers detailed options for self assessment and program improvements that encourage increased female participation in industrial arts.

The *Special Needs Guide for Industrial Arts Programs* is a response to a growing recognition that students with special needs should be welcome in any classroom. This guide explains some of the terminology and definitions associated with special needs students and offers strategies for accommodating these students in industrial arts programs. Many of the special needs students, whether disadvantaged, gifted and talented, or handicapped, can succeed in industrial arts programs and be contributing members of society.

Together, these three guides can be used as resources by administrators and by industrial arts teachers, supervisors, and teacher educators. Their content provides general information and technical assistance to stimulate the integration of student organizations into industrial arts programs; provide sex fair treatment; and actively involve special needs students in all aspects of the industrial arts program.

Standards and Assessment Forms

Standards for Industrial Arts Programs

Below Standard ▽
Meets Standard ○
Exceeds Standard △

Standard Topic 1

Philosophy

The statements contained within this standard topic concern the philosophy of an industrial arts program. A philosophy is a statement of fundamental beliefs which reflect a value system. It serves as a foundation and framework for all elements of a program.

Standard Statement

A current, comprehensive, and written philosophical statement is available and influences thought and action for industrial arts.

1.1 Development

A philosophical statement for including industrial arts as an integral part of the total school curriculum is developed.

1. The philosophical statement is developed as a joint effort of a number of contributors.

   a) Industrial arts teachers are involved in developing the philosophical statement. ▽○△
   Comment:

   b) Administrators and supervisory personnel responsible for local industrial arts programs are involved in developing the philosophical statement. ▽○△
   Comment:

   c) Students, including local American Industrial Arts Student Association (AIASA) chapter members, are involved in developing the philosophical statement. ▽○△
   Comment:

d) Parents, business and industry representatives, and other consultants are involved in the development of the philosophical statement. ▽○△
Comment:

2. The philosophical statement is consistent with local, state, and national philosophies of education and of industrial arts. ▽○△
Comment:

3. The philosophical statement supports the existence of the program.

a) The philosophy describes the industrial and technological nature of society in the past, present, and future. ▽○△
Comment:

b) The philosophy identifies the needs, abilities, and interests of all learners, regardless of race, sex, creed, national origin, or handicapping conditions. ▽○△
Comment:

c) The philosophy addresses the value of industrial arts including industrial and technological literacy; career orientation, exploration, and preparation; avocational activities; economic concepts; consumer skills; creative talents; personal and social growth; and problem solving skills. ▽○△
Comment:

d) The philosophy encourages development of personal and leadership skills through AIASA. ▽○△
Comment:

e) The philosophy focuses upon the broad categories of communication, construction, manufacturing, and transportation at all educational levels. ▽○△
Comment:

4. The philosophical statement is written and on file. ▽○△
   Comment:

1.2 Utilization

The philosophical statement is the basis for program direction.

1. The philosophical statement is a basis for program planning. ▽○△
   Comment:

2. The philosophical statement is a basis for program development. ▽○△
   Comment:

3. The philosophical statement is a basis for program implementation. ▽○△
   Comment:

4. The philosophical statement is a basis for program evaluation. ▽○△
   Comment:

1.3 Review and Revise

The philosophical statement is reviewed periodically and revised when necessary.

1. The philosophical statement is reviewed annually. ▽○△
   Comment:

2. The philosophical statement is revised on the basis of the annual review. ▽○△
   Comment:

Summary for Profile

17 Number of standards for this topic

– ☐ Minus number of below standards marked

☐ Total number of standards met and exceeded
(Use this total to fill in the bar graph for this standard topic on the Industrial Arts Program Profile).

Summary of Comments

Below Standard ▽
Meets Standard ○
Exceeds Standard △

Standard Topic 2

Instructional Program

The statements contained within this standard topic concern the instructional program. This program, which reflects the stated philosophy, provides a wide variety of organized experiences for all students. These experiences assist learners in reaching predetermined goals.

Standard Statement

The instructional program reflects the stated industrial arts philosophy through experiences designed to meet the needs of all students.

2.1 Goals

Program goals are established from the stated philosophy to provide direction for program development, implementation, and evaluation.

1. The program goals encompass the major purposes of industrial arts.

   a) Emphasis is placed upon assisting students in developing insight and understanding of our industrial and technological society. ▽○△
   Comment:

   b) Emphasis is placed upon improving student ability to make informed and meaningful occupational choices. ▽○△
   Comment:

   c) Emphasis is placed upon preparing students for entry into advanced trade and industrial, technical, or other advanced education programs. ▽○△
   Comment:

d) Emphasis is placed upon developing student talents, creative abilities, positive self-concepts, and individual potentials related to industrial-technical areas. ▽○△
Comment:

e) Emphasis is placed upon developing student abilities in the safe and proper use of tools, materials, machines, and processes. ▽○△
Comment:

f) Emphasis is placed upon developing student problem-solving and decision-making abilities involving industrial materials, processes, and products. ▽○△
Comment:

g) Emphasis is placed upon reinforcing the basic skills and interrelating the content of industrial arts with other school subjects. ▽○△
Comment:

h) Emphasis is placed upon developing leadership ability, encouraging and promoting responsibility, and developing positive social interaction through AIASA. ▽○△
Comment:

2. Program goals are consistent with local, state, and national standards and emerging developments in the field. ▽○△
Comment:

3. Program goals are developed with input from teachers, administrators, students, representatives from business and industry, and other consultants. ▽○△
Comment:

4. Program goals are written and are on file ▽○△
Comment:

5. Program goals are utilized by teachers and administrators for planning, implementing, and evaluating courses. ▽○△
   Comment:

6. Program goals are reviewed annually and revised when necessary. ▽○△
   Comment:

2.2 Objectives

Objectives which reflect program goals are utilized for each course.

1. Course objectives, written in measurable terms, are presented to students and are kept on file. ▽○△
   Comment:

2. Course objectives are utilized by teachers and administrators for planning, implementing, and evaluating course content and instructional methods. ▽○△
   Comment:

3. Course objectives are utilized as a basis for developing the industrial arts component of the Individualized Education Program (IEP). ▽○△
   Comment:

2.3 Content

Course content reflects the intent of the course objectives.

1. Course content is developed from course objectives and utilizes approved curriculum guides, courses of study, and other professional resources. ▽○△
   Comment:

2. Course content is offered in the broad categories of communication, construction, manufacturing, and transportation. ▽○△
   Comment:

3. Course content is selected to provide for all students. ▽○△
Comment:

4. Course content includes the development of personal and leadership skills through AIASA. ▽○△
Comment:

5. Courses in the industrial arts program are sequential, beginning with broad orientation and exploration of subject matter areas, followed by specialized experiences. ▽○△
Comment:

6. Course content represents the state of the art in industry and technology. ▽○△
Comment:

7. Course content is organized into course outlines, unit plans, and lesson plans which are on file. ▽○△
Comment:

8. An accurate description for each course is available to all students prior to enrollment. ▽○△
Comment:

9. Course content is reviewed annually and revised when necessary. ▽○△
Comment:

2.4 Scheduling

Industrial arts courses are of sufficient duration to achieve stated program objectives.

1. Industrial arts is offered for a minimum of 18 weeks, 225 minutes per week at each grade level of the junior high/middle school and/or in each course at the senior high/high school. ▽○△
   Comment:

2. Students are encouraged to enroll in courses from more than one content category during their total industrial arts experience. ▽○△
   Comment:

Summary for Profile

27 **Number of standards for this topic**

– ☐ **Minus number of below standards marked**

☐ **Total number of standards met and exceeded**
(Use this total to fill in the bar graph for this standard topic on the Industrial Arts Program Profile).

Summary of Comments

Below Standard ▽
Meets Standard ○
Exceeds Standard △

Standard Topic 3

Student Populations Served

The statements contained within this standard topic concern the student populations served. The industrial arts program may serve all persons, pre-school through adult. Accommodations in the program are made for students with special needs.

Standard Statement

All students, regardless of their race, sex, creed, national origin, or special needs are admitted to and served by the industrial arts program.

3.1 Individual Differences

All students, regardless of their abilities and needs, are served by the industrial arts program.

1. All students are provided a variety of effective and meaningful learning experiences commensurate with industrial arts program goals and course objectives. ▽○△
   Comment:

2. Students who are academically and/or economically disadvantaged are provided special services and assistance, as required, to enable them to succeed in the industrial arts program. ▽○△
   Comment:

3. Students who have physical, mental, and/or emotional impairments are provided special services and assistance, as required, to enable them to succeed in the industrial arts program. ▽○△
   Comment:

4. Students identified as handicapped and requiring additional or modified educational services or materials are enrolled only after the Individualized Education Program (IEP) has been prepared. ▽○△
Comment:

5. Students identified as gifted and/or talented are provided learning activities consistent with their abilities. ▽○△
Comment:

6. Industrial arts is provided for students, regardless of their cultural differences. ▽○△
Comment:

7. Industrial arts activities are provided for all students appropriate to their maturity and/or educational level. ▽○△
Comment:

3.2 Sex Equity

Industrial arts is provided equitably for females as well as males.

1. Females, as well as males, are encouraged to enroll in industrial arts courses. ▽○△
Comment:

2. Industrial arts activities are provided for all students on a sex-fair basis. ▽○△
Comment:

Summary for Profile

9 Number of standards for this topic

– ☐ Minus number of below standards marked

☐ Total number of standards met and exceeded
(Use this total to fill in the bar graph for this standard topic on the Industrial Arts Program Profile).

Summary of Comments

Below Standard ▽
Meets Standard ○
Exceeds Standard △

Standard Topic 4

Instructional Staff

The statements contained within this standard topic concern the instructional staff of an industrial arts program. The instructional staff responsible for teaching industrial arts provides the essential component for a quality program. Staff members should meet the highest standards of professional and technical competence.

Standard Statement

The instructional staff is both professionally and technically competent to provide students with a quality, comprehensive industrial arts program.

4.1 Legal/Regulatory Qualifications

The instructional staff meets established state and local degree, certification, and competency requirements.

1. The industrial arts teacher possesses a minimum of a baccalaureate degree with a major in industrial arts education from an accredited teacher education program. ▽○△
   Comment:

2. The industrial arts teacher is competent in planning, organizing, directing, and evaluating activities in the industrial arts program. ▽○△
   Comment:

3. The industrial arts teacher is technically competent in the assigned teaching area(s). ▽○△
   Comment:

4. The industrial arts teacher is prepared, through preservice/inservice education, to eliminate sex bias and sex-role stereotyping. ▽○△
Comment:

5. The industrial arts teacher is prepared, through preservice/inservice education, to provide experiences for students with special needs. ▽○△
Comment:

6. The industrial arts teacher is prepared, through preservice/inservice education, to organize and operate a local AIASA chapter. ▽○△
Comment:

7. The industrial arts teacher, through preservice/inservice education, has knowledge of the legal and liability requirements of classroom/laboratory operation. ▽○△
Comment:

4.2 Professional Responsibilities

The industrial arts teacher fulfills the roles and responsibilities of a professional educator.

1. The industrial arts teacher is a member of and actively participates in professional and technical organizations related to industrial arts. ▽○△
Comment:

2. The industrial arts teacher has a professional development plan for maintaining and expanding professional and technical teaching competencies. ▽○△
Comment:

3. The industrial arts teacher participates in a minimum of one industrial arts related inservice activity annually. ▽○△
Comment:

4. The industrial arts teacher maintains current knowledge in the industrial arts field through activities such as reading professional and technical publications. ▽○△
Comment:

5. The industrial arts teacher serves as an active member of the school instructional staff, sharing in decision-making processes and participating in program promotion and staff development. ▽○△
Comment:

6. The industrial arts teacher plans and implements instruction in cooperation with counselors and other appropriate support personnel. ▽○△
Comment:

7. The industrial arts teacher has a positive attitude toward the teaching profession and demonstrates a concern for the advancement of industrial arts education. ▽○△
Comment:

4.3 Personal Qualities

The industrial arts teacher exhibits personal qualities that contribute to the fulfillment of professional responsibilities.

1. The industrial arts teacher adheres to a written code of ethics related to the performance of professional teaching responsibilities. ▽○△
Comment:

2. The industrial arts teacher demonstrates adequate and appropriate written and oral language skills. ▽○△
Comment:

3. The industrial arts teacher provides positive leadership in the classroom, the school, and the profession. ▽○△
Comment:

4. The industrial arts teacher adheres to acceptable school practices regarding personal appearance. ▽○△
Comment:

5. The industrial arts teacher exhibits good work habits such as safe practices, punctuality, neatness, and attendance that have a positive effect upon the educational environment. ▽○△
Comment:

6. The industrial arts teacher is sensitive to student needs, recognizes individual student abilities, and practices appropriate teaching methods that motivate students to maximum performance. ▽○△
Comment:

Summary for Profile

20 **Number of standards for this topic**

– ☐ **Minus number of below standards marked**

☐ **Total number of standards met and exceeded**
(Use this total to fill in the bar graph for this standard topic on the Industrial Arts Program Profile).

Summary of Comments

Below Standard ▽
Meets Standard ○
Exceeds Standard △

Standard Topic 5

Administration and Supervision

The statements contained within this standard topic concern the administration and supervision of an industrial arts program. Administrators and supervisors provide management of and direction for the program. These personnel perform leadership functions that ensure attainment of all program goals.

Standard Statement

Administration and supervision are provided at all levels to ensure a well managed and comprehensive industrial arts program.

5.1 Staffing

An adequate number of certified and qualified administrators, supervisors, and faculty is provided to ensure attainment of program goals and objectives.

1. An adequate number of qualified state industrial arts supervisors is provided.

a) A minimum of one full-time state industrial arts supervisor is provided and an additional supervisor is provided for every 500 teachers. ▽○△
Comment:

b) State supervisors are qualified industrial arts teachers, have taught industrial arts for a minimum of three years, and hold an appropriate master's degree. ▽○△
Comment:

c) One full-time, or equivalent, state AIASA advisor is provided in each state. ▽○△
Comment:

2. An adequate number of local industrial arts supervisors is provided.

a) A minimum of one full-time local industrial arts supervisor is provided for 25 or more industrial arts teachers, or for districts with less than 25 industrial arts teachers, appropriate proportional supervision is provided. ▽○△
Comment:

b) Local supervisors are qualified industrial arts teachers, have taught industrial arts for a minimum of three years, and hold an appropriate master's degree. ▽○△
Comment:

c) A job description which includes the qualifications, duties, and responsibilities of each local industrial arts supervisor is available. ▽○△
Comment:

3. In addition to local supervision, departmental leadership or management is provided. ▽○△
Comment:

4. An adequate number of qualified and certified industrial arts teachers is provided to meet enrollment demands.

a) A maximum of 20 students are enrolled per teacher, per period of laboratory activity. ▽○△
Comment:

b) A minimum of one non-teaching period for preparation is provided each day. ▽○△
Comment:

c) Time is provided to enable the industrial arts teacher to organize and advise a local AIASA chapter. ▽○△
Comment:

5. Teacher aides or paraprofessionals are provided in classes where enrollment of students with special needs necessitates their assistance. ▽○△
Comment:

5.2 Planning and Organizing

A system is provided which ensures program direction, short and long range planning, organization, and administration for program operation and improvement.

1. Supervisors and teachers utilize predetermined standards to plan and organize the industrial arts program. ▽○△
Comment:

2. Provisions are made for teachers to review, develop, and adapt curriculum and instructional materials which are compatible with local and state industrial arts guidelines. ▽○△
Comment:

3. Supervisors and teachers cooperatively develop specifications for industrial arts equipment and resource materials. ▽○△
Comment:

4. Supervisors involve teachers in developing specifications for industrial arts facility design, development, and renovation. ▽○△
Comment:

5.3 Budgeting

A budgeting system is utilized to ensure the identification and procurement of all resources essential for the accomplishment of program goals and course objectives, consistent with student enrollment and unique student needs.

1. Funds are budgeted for purchase of equipment to accomplish course objectives. ▽○△
Comment:

2. Funds are budgeted for consumable materials and supplies to accomplish course objectives. ▽○△
Comment:

3. Funds are budgeted for equipment maintenance and facility improvements to accomplish course objectives. ▽○△
Comment:

4. Funds are budgeted for instructional materials to accomplish course objectives. ▽○△
Comment:

5. Funds are budgeted for staff development.

a) Funds are budgeted for travel, release time, and substitutes for personnel to participate in inservice professional activities. ▽○△
Comment:

b) Funds are budgeted for travel, release time, and substitutes for personnel to participate in local, state, and national AIASA activities. ▽○△
Comment:

5.4 Directing and Monitoring

Appropriate policy statements, written directives, and supervisory visits are utilized to ensure full program implementation.

1. Written administrative policies and directives, specifically addressing the operation of the industrial arts program, are available. ▽○△
Comment:

2. Teachers are visited on a regularly scheduled basis by supervisory personnel. ▽○△
Comment:

5.5 Data Collecting and Reporting

An information system is utilized to collect, analyze, transmit, and maintain data on programs, teachers, and students.

1. Reports required by local, state, and federal agencies are prepared and submitted on schedule. ▽○△
   Comment:

2. Accurate financial reports are prepared and submitted on schedule. ▽○△
   Comment:

3. Safety reports are prepared and submitted on schedule. ▽○△
   Comment:

4. Student records are prepared, maintained, and utilized by appropriate school officials according to local, state, and federal regulations.

   a) A biographic, academic, and medical profile is maintained on each student enrolled in industrial arts. ▽○△
   Comment:

   b) Demographic data about all industrial arts students are available by grade level and by course, including but not limited to course enrollments by racial and ethnic categories, by sex, and by type and number of students with special needs. ▽○△
   Comment:

5. Records and related information on all advisory committee activities are prepared and distributed to appropriate staff, administrators, and other personnel. ▽○△
   Comment:

6. Records and related information on equipment, tools, textbooks, and supplies are prepared and made available to appropriate personnel. ▽○△
   Comment:

5.6 Communicating

Communication is maintained among faculty, administrative personnel, students, and the community.

1. Effective, open communication pertaining to all elements in the instructional program is established and utilized consistently among industrial arts faculty and school staff. ▽○△
   Comment:

2. Effective, open communication pertaining to all elements in the instructional program is established and utilized consistently among administrators, school board members, supervisors, advisory committees, and faculty. ▽○△
   Comment:

3. Effective, open communication pertaining to all elements in the instructional program is established and utilized consistently among students, parents, and faculty. ▽○△
   Comment:

Summary for Profile

33 **Number of standards for this topic**

– ☐ **Minus number of below standards marked**

☐ **Total number of standards met and exceeded**
(Use this total to fill in the bar graph for this standard topic on the Industrial Arts Program Profile).

Summary of Comments

Below Standard ▽
Meets Standard ○
Exceeds Standard △

Standard Topic 6

Support Systems

The statements contained within this standard topic concern support systems. These support systems include human, physical, and financial resources that are necessary to implement the instructional program. These resources are required to provide a comprehensive, quality industrial arts program.

Standard Statement

Support systems provide human, physical, and financial resources instrumental for attaining program goals and objectives.

6.1 Human Resources

Personnel services are provided and utilized to support and supplement the industrial arts program.

1. School support staff services are provided to support the industrial arts program.

a) Media/instructional resource center services are provided to support the industrial arts program. ▽○△
Comment:

b) Personnel are available to assist the industrial arts teacher in serving students with special needs. ▽○△
Comment:

c) Guidance services are provided to assist all students in determining their interests, aptitudes, and abilities; selecting the program that meets their career/avocational goals; and expanding their individual options. ▽○△
Comment:

d) Industrial arts teachers obtain interdisciplinary support to assist in achieving program objectives. ▽○△
Comment:

e) Secretarial and clerical services are provided for industrial arts personnel. ▽○△
Comment:

f) Custodial services are provided to assure safe and sanitary industrial arts facilities. ▽○△
Comment:

g) Maintenance services are provided to assure safe and functional industrial arts facilities and equipment. ▽○△
Comment:

h) Medical personnel are available to provide instruction and ensure the safety and welfare of students and faculty. ▽○△
Comment:

2. The industrial arts teacher identifies and utilizes people in the community to assist in achieving program goals and course objectives.

a) Parents are utilized in achieving program goals and course objectives. ▽○△
Comment:

b) The teacher involves representatives from business and industry to assist in achieving program goals and course objectives. ▽○△
Comment:

c) Members of service/civic organizations are identified and utilized in achieving the program goals and course objectives. ▽○△
Comment:

3. An industrial arts advisory committee is established and utilized to support the program goals and course objectives.

a) An industrial arts advisory committee is established which has representation of both sexes and the racial and ethnic minorities found in the program areas, schools, community, or region which the local advisory committee serves. ▽○△
Comment:

b) The industrial arts advisory committee includes appropriate representation from business and industry. ▽○△
Comment:

c) The industrial arts advisory committee is utilized to advise teachers, administrators, and the board of education in planning, developing, implementing, and evaluating the industrial arts program. ▽○△
Comment:

d) The industrial arts advisory committee meets at least twice a year. ▽○△
Comment:

6.2 Physical Resources

Physical resources such as the facility, equipment, and instructional materials are provided to assist in achieving the program goals and course objectives.

1. Industrial arts laboratories average 2500 square feet or 125 square feet per student, exclusive of ancillary space. ▽○△
Comment:

2. Industrial arts ancillary space, at an average of 500 square feet for each laboratory, is provided for storage of materials, projects/products, and tools. ▽○△
Comment:

3. The number of students enrolled in an industrial arts class does not exceed the capacity and safety of the facilities and equipment at a 125 square foot, per pupil, criterion level. ▽○△
Comment:

4. Facilities meet existing local, state, and federal health and safety standards. ▽○△
Comment:

5. Facilities are logically arranged and maintained with consideration given to effective teaching, safety, class management, and economy. ▽○△
Comment:

6. At least 100 square feet of office space per teacher, within or adjacent to the industrial arts facility, is provided. ▽○△
Comment:

7. Facilities are reviewed annually and modified, as needed, to accommodate changes in the course objectives and changes in technology. ▽○△
Comment:

8. Accessibility for the handicapped is ensured through the elimination of architectural barriers. ▽○△
Comment:

9. Lavatory facilities for both sexes are provided near or in the industrial arts laboratory. ▽○△
Comment:

10. Consumable supplies and materials are provided in sufficient quantity and quality to achieve course objectives. ▽○△
Comment:

11. Properly maintained tools, machines, and equipment are available on the basis of their instructional value in fulfilling program goals and course objectives. ▽○△
Comment:

12. Specially designed or modified tools, machines, and equipment are provided for students with special needs. ▽○△
Comment:

13. Equipment meets or exceeds local, state, and federal safety standards. ▽○△
Comment:

14. Books and other instructional materials are supplied in sufficient quantity to meet program goals and course objectives. ▽○△
Comment:

15. Books and other instructional materials contain sex-fair language and images and provide a wide range of role options. ▽○△
Comment:

16. Books and other instructional materials are provided to meet the unique requirements of students with special needs. ▽○△
Comment:

17. Resource materials developed or approved by the state education agency are available and utilized at the local level. ▽○△
Comment:

6.3 Financial Resources

Sufficient funds are budgeted and expended to operate and maintain the industrial arts program.

1. The program is supported by an annual written budget based upon the program needs and student enrollment. ▽○△
   Comment:

2. Budgeted funds for supplies, equipment, and resource materials are expended to fully achieve program goals and objectives. ▽○△
   Comment:

3. Budgeted funds are expended for staff development activities. ▽○△
   Comment:

4. Budgeted funds are expended to support the operation of a local AIASA chapter. ▽○△
   Comment:

Summary for Profile

36 Number of standards for this topic

– ☐ Minus number of below standards marked

☐ Total number of standards met and exceeded
(Use this total to fill in the bar graph for this standard topic on the Industrial Arts Program Profile).

Summary of Comments

Below Standard ▽
Meets Standard ○
Exceeds Standard △

Standard Topic 7

Instructional Strategies

The statements contained within this standard topic concern instructional strategies. These strategies are the methods utilized to deliver instruction and promote student achievement of goals and objectives. The industrial arts instructor plans, implements, and evaluates these strategies.

Standard Statement

Appropriate instructional strategies are designed and utilized to meet program goals, course objectives, and student needs.

7.1 Planning

Written instructional plans which meet individual needs are developed and utilized to achieve stated course objectives.

1. Teachers plan and prepare written courses of study designed to develop student competencies consistent with program goals and course objectives. ▽○△
   Comment:

2. Teachers plan and prepare current lesson plans based upon the course of study and student needs. ▽○△
   Comment:

3. Teachers consider alternatives and select appropriate methods to assist students in meeting course objectives. ▽○△
   Comment:

4. Teachers develop and/or obtain appropriate, up-to-date instructional materials. ▽○△
   Comment:

5. Teachers plan and provide for evaluating the effectiveness of their instruction. ▽○△
Comment:

6. Teachers provide input to the Individualized Education Program (IEP) committee for handicapped students enrolled in industrial arts. ▽○△
Comment:

7.2 Implementing

Instructional and leadership development methods are utilized to accomplish course objectives and meet the unique needs of individual students.

1. The industrial arts teacher utilizes a variety of teaching methods in conducting classroom and laboratory activities.

   a) Both teacher-centered and student-centered instructional methods are utilized. ▽○△
   Comment:

   b) Instructional methods include both group and individual student learning activities. ▽○△
   Comment:

   c) Instructional methods utilized are based upon individual student needs rather than upon the sex of the students. ▽○△
   Comment:

   d) Local AIASA chapter activities are integrated into planned courses of study and are utilized in conducting classroom and laboratory activities. ▽○△
   Comment:

   e) Instructional strategies appropriate for serving students with special needs have been identified and incorporated into the industrial arts program. ▽○△
   Comment:

2. Student achievement is measured through a variety of testing techniques and other evaluation methods. ▽○△
Comment:

3. Each identified handicapped student enrolled in industrial arts is evaluated annually through procedures and criteria described in the Individualized Education Program (IEP). ▽○△
Comment:

4. Student leadership skills are developed through a variety of curricular and extra-curricular activities. ▽○△
Comment:

7.3 Reviewing and Revising

Instructional strategies are evaluated periodically and revised when necessary.

1. Student achievement is assessed to make systematic decisions regarding the effectiveness of instructional materials and teaching strategies. ▽○△
Comment:

2. Provisions are made for student input into the evaluation of instructional strategies. ▽○△
Comment:

Summary for Profile

16 Number of standards for this topic

– ☐ Minus number of below standards marked

☐ Total number of standards met and exceeded
(Use this total to fill in the bar graph for this standard topic on the Industrial Arts Program Profile).

Summary of Comments

Below Standard ▽
Meets Standard ○
Exceeds Standard △

Standard Topic 8

Public Relations

The statements contained within this standard topic concern public relations. An informed and involved public is essential to the promotion of an industrial arts program. Various media are utilized to inform target populations.

Standard Statement

Various methods and media are utilized to inform and involve the educational community, the lay public, business, industry, and government to generate support and ensure full program implementation.

8.1 Target Populations

The educational community, the lay public, business, industry, and government are informed of and given the opportunity to participate in industrial arts programs and activities.

1. Students, parents, faculty and staff, school administrators, and members of professional teacher organizations are informed of and given the opportunity to participate in industrial arts programs and activities.

   a) Students promote and support industrial arts programs through involvement in activities, including AIASA. ▽○△
   Comment:

   b) Parents support and participate in the industrial arts program by functioning as paraprofessionals, advisors, or resource people. ▽○△
   Comment:

   c) Non-industrial arts faculty and staff are informed about the industrial arts program for the purpose of generating support, guidance, and interdisciplinary educational opportunities. ▽○△
   Comment:

d) Building and district administrators are informed about and participate in the industrial arts program. ▽○△
Comment:

e) State level administrators are informed about and participate in the industrial arts program. ▽○△
Comment:

f) Local, state, and national professional associations are informed about and participate in the industrial arts program. ▽○△
Comment:

2. The industrial arts faculty actively encourages community involvement and promotes a greater understanding of the program's needs and accomplishments.

a) Community service organizations are informed of and encouraged to support the industrial arts program. ▽○△
Comment:

b) Business and industrial personnel are informed of and given the opportunity to participate in industrial arts programs and activities. ▽○△
Comment:

c) Management and labor personnel are informed of and encouraged to support and participate in selected aspects of the industrial arts program. ▽○△
Comment:

d) Technical, professional, and labor organizations are informed of and encouraged to support and participate in the industrial arts program. ▽○△
Comment:

3. A public information plan is developed and implemented which includes active participation with government at all levels.

   a) A public information program is utilized to inform and encourage the support of local elected and appointed officials, including school board members. ▽○△
   Comment:

   b) A public information program is utilized to inform and encourage the support of the elected and appointed state officials, including legislators and executive branch personnel. ▽○△
   Comment:

   c) A public information program is utilized to inform and encourage the support of elected and appointed national officials, including legislators and executive branch personnel. ▽○△
   Comment:

8.2 Media

Various media are utilized to communicate the goals, objectives, and accomplishments of the industrial arts program.

1. Radio and television are utilized to promote the industrial arts program activities and accomplishments. ▽○△
   Comment:

2. Articles describing unique activities and accomplishments of the industrial arts program are prepared and published in the local news media on a regular basis. ▽○△
   Comment:

3. Handbooks and brochures describing the industrial arts program, goals, objectives, and policies are prepared and utilized. ▽○△
   Comment:

4. Articles describing industrial arts program activities and accomplishments are prepared and published in local, state, and national professional publications. ▽○△
Comment:

5. Media events, including open houses, exhibits, displays, presentations, demonstrations, and industrial arts education week activities are utilized to promote the program. ▽○△
Comment:

Summary for Profile

18 Number of standards for this topic

– ☐ Minus number of below standards marked

☐ Total number of standards met and exceeded
(Use this total to fill in the bar graph for this standard topic on the Industrial Arts Program Profile).

Summary of Comments

Below Standard ▽
Meets Standard ○
Exceeds Standard △

Standard Topic 9

Safety and Health

The statements contained within this standard topic concern safety and health. A comprehensive safety and health program is essential to the success of a quality industrial arts program. The program provides for a safe environment and promotes life-long attitudes and practices regarding safety and health.

Standard Statement

A written, comprehensive safety and health program is implemented to ensure safe working conditions and practices.

9.1 Program

Learning experiences and activities are designed for the development of knowledge, skills, and attitudes concerning the safe use of tools, machines, materials, and processes.

1. An instructional plan for safety and health is prepared utilizing community resources, administrative personnel, instructors, and safety literature.

   a) Teachers prepare a written plan for a comprehensive safety and health program. ▽○△
   Comment:

   b) Administrative personnel provide input for and approval of the safety and health program. ▽○△
   Comment:

   c) Community resources, including the industrial arts advisory committee, provide input to the safety and health program. ▽○△
   Comment:

d) Local, state, and national safety and health literature and regulations are utilized in planning the safety and health program. ▽○△
Comment:

2. Safety and health instruction is included in classroom and laboratory activities.

a) Safety and health information is included in instruction for all laboratory activities. ▽○△
Comment:

b) Teacher and student activities reinforce safety and health instruction. ▽○△
Comment:

c) Safety and health instruction is adapted to individual student needs. ▽○△
Comment:

3. Techniques are utilized to assess the effectiveness of the safety and health program.

a) Safety and health practices are monitored continuously and reviewed annually by the teacher. ▽○△
Comment:

b) Local administrators assess and make recommendations for the improvement of the safety and health program. ▽○△
Comment:

c) Proper authorities, external to the school, inspect periodically and report on the safety and health program. ▽○△
Comment:

d) Students demonstrate acceptable knowledge, skills, and attitudes of safety and health practices and rules through written and performance tests, and in-class behavior. ▽○△
Comment:

e) Teachers and administrators review each recorded accident and all unsafe practices to correct deficiencies. ▽○△
Comment:

9.2 Physical Environment

The physical facilities and equipment are designed, constructed, and maintained to ensure a safe and healthful learning environment.

1. Laboratory facilities meet safety and health laws and regulations. ▽○△
Comment:

2. Laboratory facilities conform to acceptable industrial arts safety and health practices.

a) Safety zones and aisles are properly marked. ▽○△
Comment:

b) Lighting is appropriate for the activities performed within the facility. ▽○△
Comment:

c) Proper exhaust system equipment which removes fumes, chips, and dust from the building is provided. ▽○△
Comment:

d) Proper equipment is provided to heat, cool, and ventilate all instructional and ancillary areas. ▽○△
Comment:

e) Approved safe cabinets, containers, or rooms are provided to store flammable and corrosive materials. ▽○△
Comment:

f) Special safety and health accommodations are provided for students with special needs. ▽○△
Comment:

g) Floors and all other surfaces are kept free of waste material, grease, and obstructions. ▽○△
Comment:

h) Floors have non-skid surfaces, with special application on machine-operator work areas. ▽○△
Comment:

i) Each laboratory with powered equipment has the equivalent of one easily accessible emergency disconnect switch (panic button) per perimeter wall. ▽○△
Comment:

j) Fire extinguishers of the correct class are provided in appropriate locations. ▽○△
Comment:

k) A first-aid kit and related emergency supplies are provided in accordance with local regulations. ▽○△
Comment:

3. Machines and tools are selected, organized, guarded, color coded, controlled, and ventilated in accordance with regulations and codes.

a) Equipment which satisfies state and federal regulations is selected on the basis of the ability to meet program objectives safely. ▽○△
Comment:

b) Machines and tools are placed, mounted if necessary, and arranged in a safe and functional manner. ▽○△
Comment:

c) All machines and power tools are provided with approved commercial guards and safety devices. ▽○△
Comment:

d) Safety guards remain in place, except when the machine is disconnected for cleaning, repair, or adjustment. ▽○△
Comment:

e) Any machine or tool found to be unsafe is removed from service and marked accordingly. ▽○△
Comment:

f) Color-coding schemes for safety purposes are used throughout the industrial arts laboratory. ▽○△
Comment:

g) Conveniently located magnetic control switches and/or control boxes and braking devices are provided for appropriate machines. ▽○△
Comment:

h) Lockable master switch boxes are located in each industrial arts laboratory. ▽○△
Comment:

i) Machines and work stations where dust or fumes are produced beyond accepted health limits are connected to an exhaust system. ▽○△
Comment:

4. Personal protection devices are used by teachers, students, and visitors to maximize safety, and such devices are sanitized to maximize health in the laboratory.

a) State or federally approved eye protection devices are required of all persons exposed to conditions which may cause eye injury. ▽○△
Comment:

b) State or federally approved ear protection devices are required of all persons exposed to conditions which may cause ear damage. ▽○△
Comment:

c) State or federally approved respiratory protection devices are required of all persons exposed to conditions which may cause respiratory problems. ▽○△
Comment:

d) State or federally approved head protection devices are required of all persons exposed to conditions which may cause head injury. ▽○△
Comment:

e) Specially adapted personal protection devices are available for and used by students with special needs. ▽○△
Comment:

f) Teachers and students wear appropriate clothing when exposed to conditions which warrant such protection. ▽○△
Comment:

g) Personal protection devices requiring sanitation are sanitized after each use. ▽○△
Comment:

5. Corrective and preventive maintenance is performed within a reasonable time following written notification to the appropriate administrator. ▽○△
Comment:

9.3 Records

Records are on file to document the existence of an effective safety and health program.

1. Safety and health instructional records are on file.

   a) Lesson plans documenting provision for safety and health instruction are on file. ▽○△
   Comment:

   b) Results of written and performance tests and observations documenting student safety and health knowledge, attitudes, and skills are on file. ▽○△
   Comment:

2. Records detailing current safety and health conditions in the facility are on file.

   a) Inspection, maintenance, repair, and replacement records are current and on file. ▽○△
   Comment:

   b) Records of each accident and the follow-up procedures taken are on file. ▽○△
   Comment:

   c) Emergency procedures for responding to accidents are posted and on file. ▽○△
   Comment:

Summary for Profile

46 Number of standards for this topic

– ☐ Minus number of below standards marked

☐ Total number of standards met and exceeded
(Use this total to fill in the bar graph for this standard topic on the Industrial Arts Program Profile).

Summary of Comments

Below Standard ▽
Meets Standard ○
Exceeds Standard △

Standard Topic 10

Evaluation Process

The statements contained within this standard topic concern the evaluation process. All elements of the program are systematically and continuously assessed and compared to desired standards. The standards in this document serve as bases for the evaluation of industrial arts programs.

Standard Statement

A systematic, continuous evaluation program exists and utilizes standards to assess all elements of industrial arts programs.

10.1 Establishing a Data Collection and Analysis System

Appropriate procedures are established and utilized to obtain valid and reliable information for program assessment.

1. Teachers, administrators, and supervisors determine what aspects of the industrial arts program are to be included in the data collection and analysis system. ▽○△
   Comment:

2. The target sites and populations to be assessed are selected by appropriate individuals. ▽○△
   Comment:

3. Instruments, based upon the standards contained in this document, are designed and/or selected to obtain valid and reliable information. ▽○△
   Comment:

10.2 Collecting and Analyzing Data

Data on selected aspects of the industrial arts program are collected on a prescribed schedule.

1. Instruments are administered annually to collect valid and reliable data on selected aspects of the industrial arts program. ▽○△
   Comment:

2. Data on the total industrial arts program are collected at least once every five years. ▽○△
   Comment:

3. Data are collected in compliance with accrediting agencies and state and federal mandates. ▽○△
   Comment:

4. Valid procedures are utilized to analyze data and identify discrepancies between the current program and the standards in this document. ▽○△
   Comment:

10.3 Reporting

An assessment report containing data, notations of discrepancies, and recommendations is made annually.

1. Findings from the data collection and analysis efforts are disseminated to the evaluator, the evaluatee, and to appropriate decision makers. ▽○△
   Comment:

2. Discrepancies between program status and standards are reported to appropriate decision makers. ▽○△
   Comment:

3. Recommendations for correcting deficiencies are reported to apppropriate decision makers. ▽○△
   Comment:

10.4 Decision Making

Decisions for program improvement are based upon the assessment report.

1. A written course of action is developed for overcoming each deficiency. ▽○△
   Comment:

2. Priorities are determined and actions are implemented to correct deficiencies. ▽○△
   Comment:

3. The effectiveness of the courses of action taken is assessed. ▽○△
   Comment:

Summary for Profile

13 Number of standards for this topic

– ☐ Minus number of below standards marked

☐ Total number of standards met and exceeded
(Use this total to fill in the bar graph for this standard topic on the Industrial Arts Program Profile).

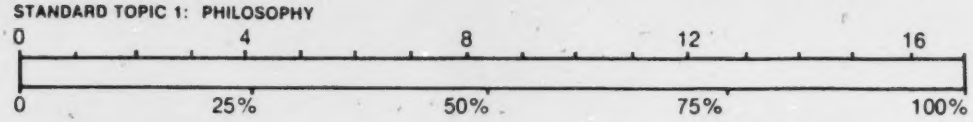
Summary of Comments

Assessment Forms

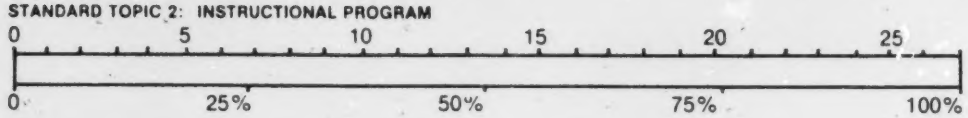
Industrial Arts Program Profile
Deficiency Correction Report

Industrial Arts Program Profile

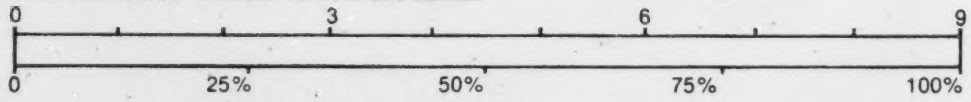
STANDARD TOPIC 1: PHILOSOPHY



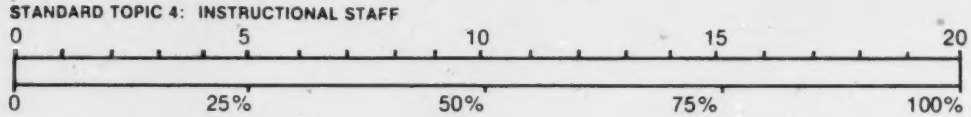
STANDARD TOPIC 2: INSTRUCTIONAL PROGRAM



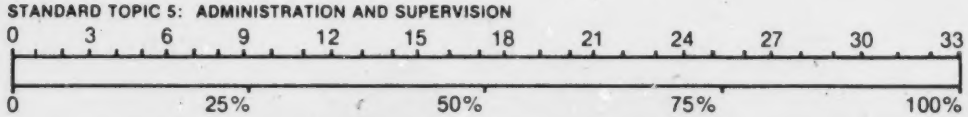
STANDARD TOPIC 3: STUDENT POPULATIONS SERVED



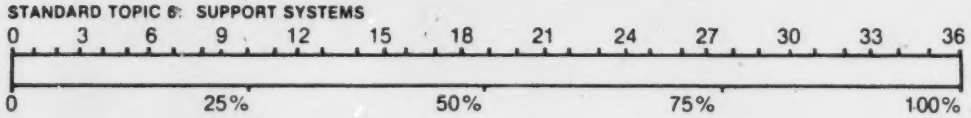
STANDARD TOPIC 4: INSTRUCTIONAL STAFF



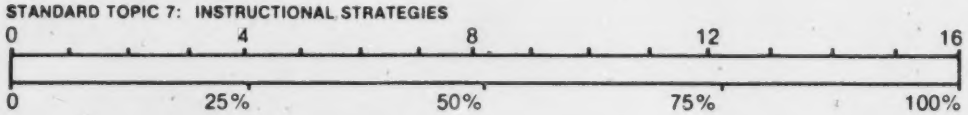
STANDARD TOPIC 5: ADMINISTRATION AND SUPERVISION



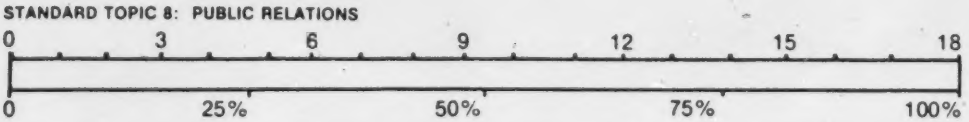
STANDARD TOPIC 6: SUPPORT SYSTEMS



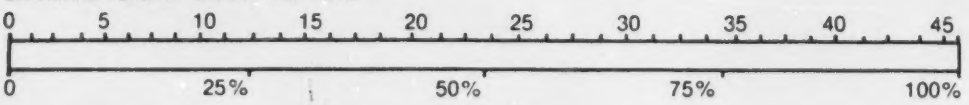
STANDARD TOPIC 7: INSTRUCTIONAL STRATEGIES



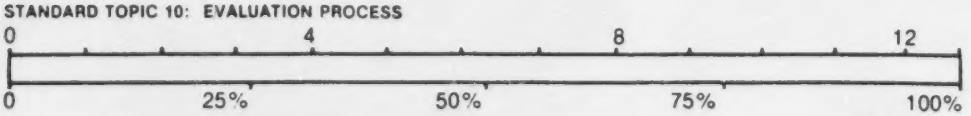
STANDARD TOPIC 8: PUBLIC RELATIONS



STANDARD TOPIC 9: SAFETY AND HEALTH



STANDARD TOPIC 10: EVALUATION PROCESS



Deficiency Correction Report

School: _____ Reported by: _____ Date: _____

Item for Which Program is Below Standard: _____

_____

_____

Topic Number: _____ Page Number: _____ Standard Number: _____

Statement of Deficiency:

Priority for Correction: High Medium Low (circle one)

Person(s) Responsible for Correcting Deficiency: _____

Plan for Overcoming Deficiency:

Resources Required:

Estimated Cost: $ _____

Estimated Completion Date: _____

Date Standard Met: _____

Acknowledgments

Acknowledgments

A project of this magnitude has involved the efforts of many persons. Three major categories of professionals who worked with the Standards for Industrial Arts Programs Project will be recognized here. These are the a) project staff, b) advisory committees, and c) workshop participants.

Standards Project Staff

Members of the project staff are listed below. These educators gave their attention to the project for all or part of its three-year duration.

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Research Consultant

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James A. Holmes
Graduate Research Assistant

Robert Manley
Graduate Research Assistant

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Margaret Dellapina
Secretarial Staff

Teresa Greene
Secretarial Staff

Lynn Griggs
Secretarial Staff

Betty Sturgill
Secretarial Staff

Advisory Committees

There were three primary groups that advised the project staff. They were the national advisory committee, a subcommittee of that body, and a local advisory committee. The national advisory committee served the project in five formal meetings and in informal phone conversations and correspondence. Their hard work is greatly appreciated. Below is a listing of these individuals:

Bobbie Andrusky
Industrial arts teacher, Pearl River, LA and former member of the Board of Directors, American Industrial Arts Student Association, Inc.

Ronald W. Applegate
Executive Director, American Industrial Arts Student Association, Inc., Reston, Virginia

Donna K. Boben
Sex Equity Specialist, Vocational-Technical Education, Minnesota State Department of Education, St. Paul, MN

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James E. Good
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Clyde M. Hackler
Chair and Professor, Department of Technology, Western Washington State College, Bellingham, WA

Thomas A. Hughes, Jr.
State Supervisor, Industrial Arts, Virginia Department of Education, Richmond, VA and President-Elect, American Council of Industrial Arts Supervisors

David L. Jelden
Professor, Industrial Arts and Technology, University of Northern Colorado, Greeley, CO and former President, American Council on Industrial Arts Teacher Education

Laura L. Lewis
Industrial arts teacher, Medford, NJ and former Vice-President, Classroom Teachers, American Industrial Arts Association

Donald L. Rathbun
Former Executive Director, American Industrial Arts Association, Washington, DC

Willis E. Ray
Professor, Industrial Technology Education, The Ohio State University, Columbus, OH and former President, American Industrial Arts Association

Arthur L. Robb
Industrial arts teacher, Louisville, KY and former Vice-President, Classroom Teachers, American Industrial Arts Association

Ralph V. Steeb
State Supervisor, Industrial Arts, Florida Department of Education, Tallahassee, FL and former Vice-President, Industrial Arts Division of the American Vocational Association

Kendall N. Starkweather
Executive Director, American Industrial Arts Association, Reston, VA

William E. West
Professor, Industrial Education, Clemson University, Clemson, SC and former Vice-President, Region 2, American Vocational Association

A five-member subcommittee of the national advisory committee was selected. This group met on five occasions in addition to the meetings of the parent group. This subcommittee saw the standards develop from their early conception through to their final printing. The subcommittee members' attention to detail and their broad view of industrial arts helped refine the document to its present form. The five-member subcommittee was composed of Bobbie Andrusky, James E. Good, David L. Jelden, Willis E. Ray, and Ralph V. Steeb.

A local advisory committee also was formed at the start of the project. The members were all on the faculty at the Virginia Polytechnic Institute and State University. Each had expertise in areas important to the project. All served without compensation for their time and effort by providing technical assistance to the project. These persons were:

F. Marion Asche
Associate Professor, Vocational and Technical Education

Lawrence H. Cross
Associate Professor, Educational Research

Carl O. McDaniels
Professor and Program Area Leader, Guidance and Counseling and Career Education

Robert L. McGough, III
Assistant Professor, Vocational and Technical Education

Johnnie H. Miles
Associate Professor, Guidance and Counseling

D. Michael Moore
Associate Professor, College of Education Curriculum Lab

Patricia D. Poplin
Assistant Professor, Vocational and Technical Education

Lee M. Wolfle
Assistant Professor, Educational Research

Participants At Standards Workshops

It would be impossible to acknowledge every individual who helped develop the standards. The industrial arts profession owes a debt to the many who participated in the original data collection effort. This study provided the data needed to analyze the present status of industrial arts and develop standards for the future. These people, and the many others who gave their advice and guidance, will have to go unrecognized; however, we would like to acknowledge the educators who participated in the various workshops. These people are listed by state.

Alabama
N. Creighton Alexander
James Hinkle
C. Daniel Miller

Alaska
Willis A. Madison
Ray Minge

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Lou J. Pardini
Richard Southard

Arkansas
V. N. Hukill
Noal McGuire

California
James T. Allison
Chris Almeida
Sidney Burks
Tom Catlett
Dennis A. Dirksen
Harvey Fisher
Eugene Houghton
Pam Jablonsky
Jackueline Killam
Charles Lusk
Bruce Mackie
Kenneth Phillips
George A. Randall
John Scott

Colorado
Rodney E. Anderson
Jann Cromwell
Joe Giudice
David L. Jelden
Steve Mindock

Connecticut
Werner Friess
Elsie Haworth
David M. Mordavsky
Wes Vasko

Delaware
Franklin D. Arbaugh
Thomas W. Inter

District of Columbia
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Marvin Lytle
Frank D. Perazzoli
Edward J. Roberts
Michael Sawruk
Kendall Starkweather

Florida
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Herbert C. Beacham
Charlotte Carney
Anne H. W. Johnson
Edward Nawrocki
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Charles H. Wentz

Georgia
Dennis Buchanan
Lee R. Clendenning
Bill Page
Samuel L. Powell

Hawaii
Eric Chang
John Masuhara

Idaho
Miles A. Carroll
Lee Carter
Blair Pincock
Brad Thode

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Robert O. Metzger
Vernon L. Rauch
Bill Robertson
Leslie E. Springmire
John R. Wright
Carl York

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Lloyd D. Neher
Robert Thomas
Thomas R. Wright

Iowa
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Dick Gabriel
William James
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Marie Theobold
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Kansas
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Donald M. Froelich
Donald L. Hrabik

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James R. Owens

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Ed Roy

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Diane Ward

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Charles H. Heyl
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George B. James
Kenneth J. Ladner
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Michigan
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Greg Edgerton
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Ronald J. Lutz
James L. Rudnick

Minnesota
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Donna K. Boben
Sterling Peterson
Tom Ryerson

Mississippi
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Frank R. Trocki

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B. Eugene Brightwell
Michael J. Dyrenfurth
Allen Goodridge
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E. Lee Weir

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Doug Pollette
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James A. Miller

Nevada
Dee Allred
Daniel Berg

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Robert C. Andrews
Paul Cuetara
Kenneth R. Latchaw
Raymond Tode

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William J. Rosin

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J. Michael Adams
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Clara Luna
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William J. Ratzburg

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Clark Allen
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